Astrophysics and Planetary Science Division Queen's University Belfast Belfast, N. Ireland, BT7 1NN j.mcateer@qub.ac.uk

R. T. James M^cAteer

Research Areas	Quiet Sun	Chromosp	heric Network
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Study of multi-wavelength observations of the chromospheric network. Development of image segmentation, Fourier and wavelet analysis techniques to detect correlated intensity oscillations across several optical wavelengths.

Extended to include magnetic field data from the Advanced Stokes Polarimeter (Sac. Peak, NSO).

Quiet Sun TRACE observations

Automated wavelet analysis techniques developed to compare and In prep. contrast quiet sun network and internetwork oscillations in UV wavelengths.

High Cadence Imaging

Interpretation of high-cadence coronal data from solar eclipses (Bulgaria 1999 & Zambia 2001), using SECIS (Solar Eclipse Coronal Imaging System) and coordinated SOHO-CDS observations.

Development of *RDI* (Rapid Dual Imager) Used at Big Bear Solar Observatory to carry out high cadence imaging of flaring active regions.

Research at NASA / GSFC

Analysis of RHESSI data. Planning of SOHO-CDS observations. Fractal analysis of active regions using MDI.

Education Ph. D. Astrophysics

Astrophysics and Planetary Science Division, Queen's University Belfast, Belfast, N. Ireland, U.K. Supervisors – Prof. F. P. Keenan, Dr M. Mathioudakis

M. Sci. (1st class honours) Physics with Astrophysics Astrophysics and Planetary Science Division, Queen's University

Belfast, Belfast, N. Ireland, U.K.

Co-operative Award in Science And Technology Awards

> Awarded by QUB for Ph. D. research Institute Of Physics Medal

Awarded by IOP (Ireland) for best A-level Physics result

Sep. 2000 – Present

ApJ., 2002, 567, L165 ApJ., 2003, 587, acc.

A.&A., 2002, sub. MNRAS, 2002, 336,

747

Sol.Phys., sub.

Jul. 2002-Sep. 2002

In prep.

Sep. 2002 – Present

Sep. 1996 - Jun. 2000

Sep. 2002 - Present

Oct. 2000

Memberships Fellow (Student) of the Royal Astronomical Society.

Associate member of the Institute of Physics.